

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT -- RENEWAL

PERMITTEE

Sponge Cushion, Inc.  
Attn: Hugh McLaren  
902 Armstrong Street  
Morris, Illinois 60450

Application No.: 73100161  
Applicant's Designation: SCIFESOP  
Subject: Sponge Cushion Plant  
Date Issued: November 8, 2002  
Location: 902 Armstrong Street, Morris

I.D. No.: 063060AAP  
Date Received: April 9, 2001  
Expiration Date: November 8, 2007

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of a sponge cushion plant consisting of sources: No. 9 mixer, two 60 inch mills, 3 stage filter, silo, two weigh stations, baghouse, compounding station, compounding station baghouse, two No. 11 mixers, two mixer baghouses, 100 inch mill, forming line 1, line 1 filter, forming line 2, thermal heaters, waste incinerator, cooling tower, storage tanks, trash grinder, wrapper, and scrap rubber grinder pursuant to the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons of particulate matter (PM-10), 100 tons/year of VOM, 10 tons/year individual HAP, and 25 tons/year combined HAP). As a result the source is excluded from the requirement to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
- c. This permit supersedes all operating permits issued for this location.
- 2a. PM-10 emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission</u>	<u>PM-10 Emissions</u>	
	<u>(Lb/Day)</u>	<u>(T/Yr)</u>	<u>Factor</u> <u>(Lb/Ton)</u>	<u>(Lb/Day)</u>	<u>(T/Yr)</u>
Silo	220,689	40,276	0.41	45.2	8.25
Line 2 Weigh Station	101,842	18,586	0.41	20.9	3.81
Compounding Station	16,678	3,044	0.72	6.0	1.10
Line 1 Mixer	192,000	35,040	0.27	25.9	4.73
Line 1 Weigh Station	118,850	21,690	0.41	24.4	4.45
Line 2 Mixer	163,564	29,850	0.27	22.1	4.03
Forming Line 1	192,000	35,040	0.12	11.5	2.10
Forming Line 2	163,400	29,850	0.16	13.3	2.48
Waste Incinerator	6,000	1,100	1.55	4.7	0.85

These limits are based on maximum capacities of equipment, standard emission factors, special emission factors, stack test emission factors, and information submitted in the permit application.

- b. PM-10 emissions from the cooling tower shall not exceed 0.13 ton/mo and 1.54 ton/yr. These emissions are based on the use of 13.2 mmgal/mo and 157.7 mmgal/yr of water, standard emission factors of 19.6 lb/mmgal, and information submitted in the permit application.
- c. Particulate Matter (PM-10) emissions from insignificant sources:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission</u>	<u>PM-10 Emissions</u>	
	<u>(Lb/Day)</u>	<u>(T/Yr)</u>	<u>Factor</u> <u>(Lb/Ton)</u>	<u>(Lb/Day)</u>	<u>(T/Yr)</u>
No. 9 Mixer	43,100	7,900	0.02	0.5	0.08
Line 1 60 Inch Mill	192,000	35,040	0.03	2.9	0.53
Line 2 60 Inch Mill	43,000	7,900	0.02	0.5	0.08
100 Inch Mill	163,250	29,795	0.03	2.4	0.44
Trash Grinder	4,500	850	1.08	2.4	0.44
Scrap Rubber Grinder	6,000	1,100	0.80	2.4	0.44
Wrapper	355,565	64,891	0.01	2.4	0.44
Thermal Heaters	(*1)	(*2)	(*3)	(*4)	0.36

(\*1) - 0.27 mmscf/day

(\*2) - 95.7 mmscf/yr

(\*3) - 7.6 lb/mmscf

(\*4) - 60 lb/mo

These limits are based on maximum capacities of equipment, standard emission factors, special emission factors, and information submitted in the permit application.

- d. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 3. Volatile Organic Material (VOM) emissions from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput</u> <u>([Unit]/Yr)</u>	<u>Emission</u>	<u>VOM Emissions</u> <u>(Ton/Yr)</u>
		<u>Factor</u> <u>(Lb/[Unit])</u>	
Forming Line 1	35,040 [ton]	0.24	4.2
Forming Line 2	29,850 [ton]	1.05	15.7
Thermal Heaters	95.7 [mmscf]	5.50	0.3
Waste Incinerator	500 [ton]	3.00	0.8
Oil Storage Tanks	3.2 [mmgal]	333.0	0.5

These limits are based on maximum capacities of equipment, standard emission factors, stack test emission factors, and information submitted in the permit application.

4. Hazardous Air Pollutants (HAP) emissions from the sponge cushion plant shall not exceed 0.79 ton/yr. This limit is based on a maximum of 7,900 ton/yr of rubber with a maximum free styrene content of 0.01% as submitted in the permit application.
5. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
6. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including material handling or storage activity, beyond the property line of the emission source, pursuant to 35 Ill. Adm. Code 212.301.
7. In the event that the operation of this source results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the nuisance.
- 8a. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on all the above-referenced equipment such that the equipment be kept in proper working condition and not cause a violation of the Environmental Protection Act or regulations promulgated therein.
- b. The Permittee shall maintain an operating log for the equipment, which at a minimum includes any adjustments of the equipments operating parameters, and the results of inspections, maintenance, and repair activities.
9. The Permittee shall maintain records of the following items:
  - a. The material throughput of each item of equipment in Condition 2a (lb/day and ton/yr).
  - b. The amount of additives added in the cooling tower (gal/mo and gal/yr).
  - c. The material throughput and/or the amount of fuel combusted of each item of equipment in Condition 2c (lb/day and ton/yr and/or mmscf/mo and mmscf/yr).
10. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three years from the date of entry and shall be made available for inspection and copying by the Illinois EPA and USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of

being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA request for records during the course of a source inspection.

11. If there is an exceedance of the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance Unit in Springfield, Illinois within 30 days after the exceedance. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedance or violation and efforts to reduce emissions and future occurrences.
12. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

13. The Permittee shall submit an Annual Emissions Report due May 1st of each year. If there have been no exceedances during the prior calendar year, the Annual Emissions Report shall include a statement to that effect.

If you have any questions on this, please call John P. Blazis at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:JPB:jar

cc: IEPA, FOS Region 1  
IEPA, Compliance Unit  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the sponge cushion plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions are well below the levels, e.g., 100 tons of particulate matter (PM-10) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is handled and control measures are more effective than required in this permit.

- 1a. Particulate Matter (PM-10) emissions from significant sources from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission Factor (Lb/Ton)</u>	<u>PM-10 Emissions</u>	
	<u>(Lb/Day)</u>	<u>(T/Yr)</u>		<u>(Lb/Day)</u>	<u>(T/Yr)</u>
Silo	220,689	40,276	0.41	45.2	8.25
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Forming Line 2	163,400	29,850	0.16	13.3	2.48
Waste Incinerator	6,000	1,100	1.55	4.7	0.85
Cooling Tower	(*1)	(*2)	(*3)	(*4)	1.54

(\*1) - 13.2 mmgal/mo

(\*2) - 157.7 mmgal/yr

(\*3) - 19.60 lb/mmgal

(\*4) - 260.0 lb/mo

These limits are based on maximum capacity of equipment, standard emission factors, special emission factors, stack test emission factors, and information submitted in the permit application.

- b. Particulate Matter (PM-10) emissions from insignificant sources:

<u>Item of Equipment</u>	<u>Throughput</u>		<u>Emission Factor (Lb/Ton)</u>	<u>PM-10 Emissions</u>	
	<u>(Lb/Day)</u>	<u>(T/Yr)</u>		<u>(Lb/Day)</u>	<u>(T/Yr)</u>
No. 9 Mixer	43,100	7,900	0.02	0.5	0.08
Line 1 60 Inch Mill	192,000	35,040	0.03	2.9	0.53
Line 2 60 Inch Mill	43,000	7,900	0.02	0.5	0.08
100 Inch Mill	163,250	29,795	0.03	2.4	0.44
Trash Grinder	4,500	850	1.08	2.4	0.44
Scrap Rubber Grinder	6,000	1,100	0.80	2.4	0.44
Wrapper	355,565	64,891	0.01	2.4	0.44
Thermal Heaters	(*1)	(*2)	(*3)	(*4)	0.36

- (\*1) - 0.27 mmscf/day
- (\*2) - 95.7 mmscf/yr
- (\*3) - 7.6 lb/mmscf
- (\*4) - 60 lb/mo

These limits are based on maximum capacities of equipment, standard emission factors, special emission factors, and information submitted in the permit application.

2. Volatile Organic Material (VOM) emissions from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput ([Unit]/Yr)</u>	<u>Emission Factor (Lb/[Unit])</u>	<u>VOM Emissions (Ton/Yr)</u>
Forming Line 1	35,040 [ton]	0.24	4.2
Forming Line 2	29,850 [ton]	1.05	15.7
Thermal Heaters	95.7 [mmscf]	5.50	0.3
Waste Incinerator	500 [ton]	3.00	0.8
Oil Storage Tanks	3.2 [mmgal]	333.0	0.5

These limits are based on maximum capacities of equipment, standard emission factors, stack test emission factors, and information submitted in the permit application.

3. Nitrogen Oxide (NO<sub>x</sub>) emissions from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput ([Unit]/Yr)</u>	<u>Emission Factor (Lb/[Unit])</u>	<u>NO<sub>x</sub> Emissions (Ton/Yr)</u>
Thermal Heaters	95.7 [mmscf]	100	4.8
Waste Incinerator	500 [ton]	3.00	0.7

These limits are based on maximum capacities of equipment, standard emission factors, stacktest emission factors, and information submitted in the permit application.

4. Carbon Monoxide (CO) emissions from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput ([Unit]/Yr)</u>	<u>Emission Factor (Lb/[Unit])</u>	<u>CO Emissions (Ton/Yr)</u>
Thermal Heaters	95.7 [mmscf]	84	4.1
Waste Incinerator	500 [ton]	10.00	2.4

These limits are based on maximum capacities of equipment, standard emission factors, stack test emission factors, and information submitted in the permit application.

5. Sulfur Dioxide (SO<sub>2</sub>) emissions from the sponge cushion plant:

<u>Item of Equipment</u>	<u>Throughput ([Unit]/Yr)</u>	<u>Emission Factor (Lb/[Unit])</u>	<u>SO<sub>2</sub> Emissions (Ton/Yr)</u>
Thermal Heaters	95.7 [mmscf]	0.60	0.1
Waste Incinerator	500 [ton]	2.50	0.6

These limits are based on maximum capacities of equipment, standard emission factors, stack test emission factors, and information submitted in the permit application.

6. Hazardous Air Pollutants (HAP) emissions from the sponge cushion plant shall not exceed 0.79 ton/yr. This limit is based on a maximum of 7,900 ton/yr of rubber with a maximum free styrene content of 0.01% as submitted in the permit application.

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